# ORIGINAL COMMUNICATIONS

# TRICHOSTASIS SPINULOSA

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Usually occurring on the mid-face, especially on the nose, trichostasis spinulosa occurs more commonly in young, adult black women. The lesions of trichostasis spinulosa resemble open comedones (blackheads). It may be treated with tweezing, dipilatory wax, and topical retinoic acid.

Trichostasis spinulosa (TS) appears as slightly raised, small (1 mm), dark follicular spines that must be distinguished from open comedones (blackheads). It is very commonly found on the nose. It can also be found on the forehead, face, chest, intrascapular area, and the arms. In light skinned people, TS is found in senior citizens who have suffered long term sun damage. Conversely, in dark skinned people, this condition can be seen beginning as early as adolescence. Young women may seek medical care for this condition for cosmetic reasons because it is not unusual for them to have been ineffectively treating this condition with acne and comedone remedies for some time before proper diagnosis.

Close observation, preferably with a hand lens, shows a black "spine" protruding from a hair follicle (Figure 1); usually, most of the follicles in the affected area are involved. To confirm the clinical diagnosis a few spines can be plucked by tweezing, then teased apart, and examined with low power microscopy. The plug consists of from six to 20 fine vellus hairs embedded in keratinaceous debris. These retained hairs are in the telogen phase of growth (Figures 2 and 3).

The cause of this condition is an abnormal angulation between the isthmus and the infundibulum. The infundibulum starts at the surface and ends at the opening of the sebaceous gland. The isthmus extends from there to the insertion of the pili erector muscle.<sup>2</sup>

The result of this abnormal angulation of the hair follicle can be entrapment of up to 50 small vellus hairs in a given hair follicle.<sup>3</sup>

# **CASE REPORTS**

#### Case 1

A 27-year-old woman had trichostasis spinulosa on her nose since adolescence (Figure 1). She had always assumed that they were blackheads. These lesions were removed using gentle pulling with a small tweezer. She was instructed in self-care and elected to continue therapy for cosmesis.

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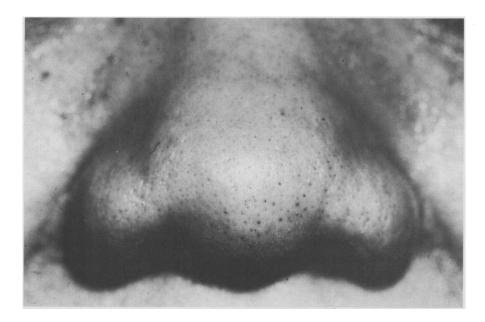


Figure 1. Trichostasis spinulosa appears as black dots or spines on the nose

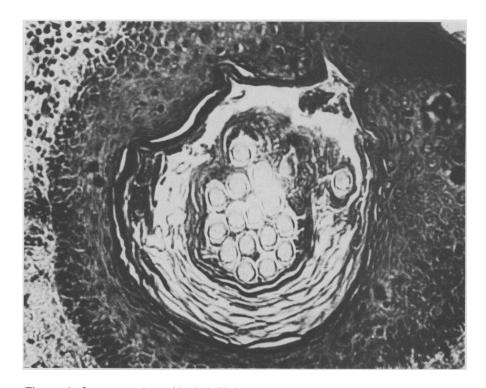


Figure 2. Cross section of hair follicle with bundle of vellus hairs as seen in trichostasis spinulosa (hematoxylin-eosin,  $\times 45$ )

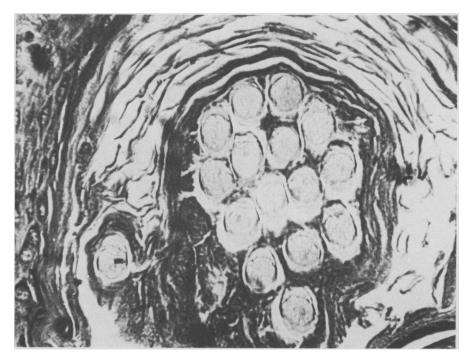


Figure 3. Higher magnification of a spine of trichostasis spinulosa in situ (hematoxylin-eosin,  $\times$  372)

## Case 2

A 23-year-old housewife, during an examination for acne, was noted to have extensive trichostasis spinulosa on her forehead. She said she wished treatment. She was treated by the application of depilatory wax. Upon cooling, the wax peeled off and removed the TS spines. Care was taken to protect her eyes with pads and to avoid involving the eyebrows. This form of therapy is not advised as home care but can be performed by experienced beauticians and hair removal specialists.

### COMMENT

Trichostasis spinulosa is not a morbid condition but can pose a cosmetic problem in a young female patient. Most people can be instructed in home care. The spines of impacted hairs can be removed by tweezing, by pressure expression, and by depilatory wax. Keratolytics may be helpful, and chemical depilatories are theoretically effective but often irritating.<sup>4</sup> Prevention may be attempted by using topical retinoic acid in the same manner it is used in comedone and acne therapy.

Our patients are reassured to learn that their skin condition is due to a variation of hair follicles rather than poor personal hygiene or acne.

#### **Literature Cited**

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